Tribo^{TM} Clenbuterol Test Strip for Urine Sample User Guide

(Catalog No. TBS11111)

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General Description

Clenbuterol, often referred to as “clen”, is a potent beta-2 agonist that can stimulate beta-2 receptors in mammals, which in turn leads to fat loss by allowing the body to release and burn more stored fat. It has been used as a performance-enhancing drug by athletes and body builders (now banned by IOC), and has been illegally used for decades in the veterinary world to increase the lean yield of livestock.

Clenbuterol can cause a multitude of adverse effects upon entering human body, such as dizziness, nausea, diarrhea, agitations, muscle cramps, hypertension, and even acute myocardial infarction (heart attack). Therefore, it has been banned in many countries to be used on food-producing animals.

The Tribo™ Clenbuterol test strip provides a convenient test to screen urine samples. It allows for **fast** (result shown in 5 minutes), **simple** (direct analysis for urine sample without pretreatment or dilution), **sensitive** and **reliable** detection of Clenbuterol in urine at 3 ppb sensitivity. If necessary, samples requiring regulatory action can be confirmed by HPLC, GC/MS, or other conventional methods.

Intended Use

The Tribo™ Clenbuterol test strip is a competitive lateral flow strip test for the qualitative analysis of Clenbuterol in urine. The sensitivity of test is 3 ppb (3 ng/ml).

Safety Instructions

To receive complete safety information on this product, contact TribioScience, Inc. and request Material Safety Data Sheet.

Assay Principles

Tribo™ Clenbuterol test strip is based on a competitive immunoassay principle. An anti-Clenbuterol monoclonal antibody is conjugated to colloidal gold and placed on conjugate pad. Colloidal gold provides red color to visualize antibody-antigen binding. Clenbuterol-protein conjugate is immobilized on nitrocellulose membrane. Test sample is loaded onto sample pad, and will subsequently mix with gold-antibody conjugate and migrate along the membrane. If the sample contains no Clenbuterol or Clenbuterol amount lower than detection limit, antibody conjugated to colloidal gold will bind Clenbuterol immobilized on membrane and present a red colored band on detection line on membrane. If Clenbuterol concentration is higher than detection limit in test sample, it

will compete with immobilized Clenbuterol on binding to the antibody, preventing the red test line from showing up. A non-specific protein is immobilized on membrane in a separate line (control line) to ensure the validity of each strip test.

Reagents and Materials in each pack

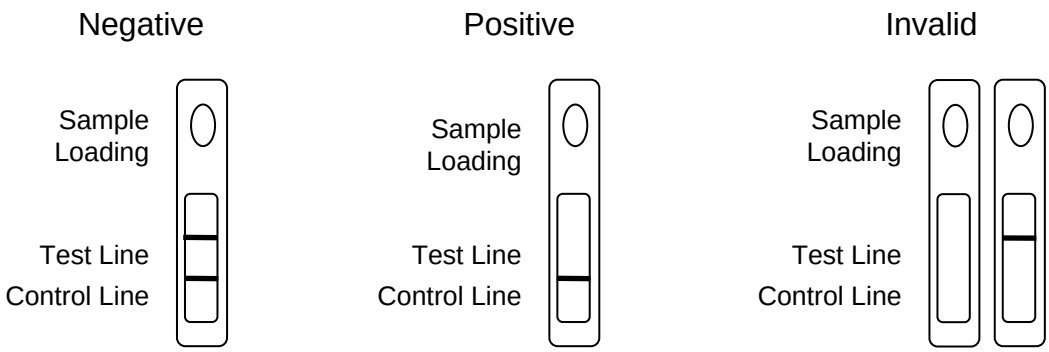
a) 1 strip of Clenbuterol test
b) 1 disposable transfer pipette

Test Procedure

- Equilibrate test strip at room temperature (20-25°C)
- Equilibrate test sample at room temperature (20-25°C)
    - i. Use disposable transfer pipette to take milk sample
    - ii. Add 3 drops to sample loading well
    - iii. After loading, read result at 5-10 minutes

Result Interpretation

Test result is interpreted by observing test line and control line shown in result window.
Negative: test line and control line present
Positive: no test line, control line present
Invalid test: no control line present



Precautions

1. Test strip should be stored at room temperature (20-25°C) and avoid freezing conditions
2. Test strip is for one time use

3. Test is performed at room temperature, strip should be equilibrated to room temperature before use
4. After open package, use the strip on the same day
5. Test samples should be equilibrated to room temperature before being loaded to strip

Storage and Expiration Date

Storage: room temperature (20-25°C).
Expiration Date: 12 months after manufacturing date.

Technical Assistance

For ordering or technical assistance regarding this product, or for additional information about TribioScience products, please email info@tribioscience.com or call (650) 917-9269.

General Limited Warranty

TribioScience, Inc. warrants its manufactured products against defects in materials and workmanship when used in accordance with the applicable instructions for a period not to extend beyond a product's printed expiration date. TribioScience makes no other warranty, expressed or implied. There is no warranty of merchantability or fitness for a particular purpose. The warranty provided herein and the data, specifications and descriptions of TribioScience products appearing in published catalogues and product literature may not be altered except by express written agreement signed by an officer of TribioScience. Representations, oral or written, which are inconsistent with this warranty or such publications are not authorized and, if given, should not be relied upon.

In the event of a breach of the foregoing warranty, TribioScience Inc.'s sole obligation shall be to repair or replace, at its option, any product or part thereof that proves defective in materials or workmanship within the warranty period, provided the customer notifies TribioScience promptly of any such defect. The exclusive remedy provided herein shall not be deemed to have failed of its essential purpose so long as TribioScience is willing and able to repair or replace any nonconforming TribioScience product or part. TribioScience shall not be liable for consequential, incidental, special or any other indirect damages resulting from economic loss or property damage sustained by a customer from the use of its products. However, in some states the purchaser may have rights under state law in addition to those provided by this warranty.

For research use only.

Tribo™克伦特罗快速检测试纸卡使用说明书

（尿样检测）

产品编号：TBS11111

1. 产品概述:

克伦特罗，又名瘦肉精，属于β-兴奋剂类药物，是一种肾上腺类神经兴奋剂。当添加到动物饲料中后，可以增加动物的瘦肉量，同时减少饲料使用。然而瘦肉精为增加瘦肉率所需用量大，在动物体内代谢缓慢，在肉类尤其是内脏中会有大量残留，如果食用进入人体会直接危害人体健康，出现晕厥、心慌、战栗、头疼、恶心、呕吐、肌肉振颤等中毒症状，特别是对高血压、心脏病等疾病患者危害更大，严重的可导致死亡。瘦肉精是国家明令禁止使用的饲料添加剂。

本产品将胶体金免疫层析原理应用于克伦特罗含量的快速测定。可以直接检测动物尿样，样品不需要稀释和前处理，使用简便。反应灵敏，检测灵敏度为 3 纳克/毫升（3ppb）。检测迅速，结果在 5-10 分钟内显示。

2. 用途及灵敏度：

本产品适用于尿样中克伦特罗（Clenbuterol)含量的快速检测。

检测灵敏度：3 纳克/毫升(3ppb)

3. 检测原理：

本产品将胶体金免疫层析原理应用于克伦特罗含量的快速测定。在试纸卡中，抗克伦特罗抗体偶联到胶体金颗粒上，克伦特罗测试抗原固定在纤维素滤膜上。如果样品不含有克伦特罗，胶体金抗体偶联物与固定抗原结合，在膜上显示检测线，检测结果为阴性。如果样品中含有克伦特罗，克伦特罗结合在胶体金抗体偶联物上，抑制了胶体金抗体偶联物与固定抗原的结合，不显示检测线，检测结果为阳性。

4. 试纸卡产品组成：

试纸卡（1 块）；一次性吸管（1 支）；干燥剂（1 块）

5. 样本收集:

尿样标本必须收集在洁净、干燥、不含有防腐剂的塑料杯或玻璃容器内。若不能及时送检，尿样可在 2-8℃冷藏保存 24 小时。长期保存需冷冻于-20℃，样品需避免反复冻融。

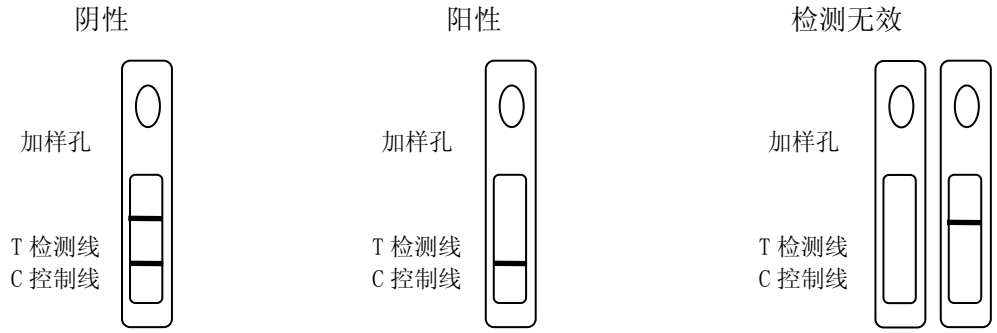
6. 检测步骤：

（1）测试前将未开封的检测卡和尿样恢复至室温,从铝箔袋中取出检测卡后尽快使用

（2）将检测卡平放,用一次性吸管吸取待检尿样,在加样孔内滴加样品 3 滴

（3）加样后计时，5-10 分钟判定结果

7. 结果判定：
阴性（-）：检测线（T）和控制线（C）都显色，表明样品中的克伦特罗浓度低于 3 纳克/毫升
阳性（+）：检测线（T）无色，控制线（C）显色，表明样品中的克伦特罗浓度高于 3 纳克/毫升
无效：控制线（C）无色，表示使用方法不正确或试纸卡失效，结果无效。请对照使用说明书，用新的试纸卡重新测定



8. 注意事项：

（1）试纸卡为一次性使用。打开包装后，请在当日尽快使用。
（2）在室温(20-25℃)下使用，待测样品达到室温(20-25℃)后测试。
（3）由于尿样颜色差异，有的检测线颜色偏淡或偏灰，只要出现条带，就可判定为阴性结果。

9. 储存条件和有效期：
产品原包装在室温(20-25℃)下储存，置于阴凉避光干燥处。有效期为 12 个月，产品批号及有效期见包装袋。

本产品仅供研究使用。